

## DUTY STATEMENT

<b>CLASSIFICATION TITLE</b> Transportation Engineering Technician	<b>DISTRICT/DIVISION/OFFICE</b> HQ/Maintenance/Struct. Maint. & Invest. - South	
<b>WORKING TITLE</b> Transportation Engineering Technician	<b>POSITION NUMBER</b> 913-627-3175-002	<b>EFFECTIVE</b> January 8, 2007

**As a valued member of the Caltrans team, you make it possible for the Department to improve the mobility across California by being innovative and flexible; reporting to work regularly and on time; working cooperatively with team members and others; and treating others fairly, honestly and with respect. Your efforts are important to each member of the team, as well as those we serve.**

### **GENERAL STATEMENT:**

Under the supervision of the Branch Chief, a Senior Bridge Engineer, the incumbent is responsible for assisting Area Bridge Maintenance Engineers (ABMEs), Districts, Public Agencies and Consultants for coordinating matters pertaining to As-Built plans, Bridge Investigation Reports, documenting Encroachment Permit Reviews and input Bridge Investigation Reports and other documents into bridge management system (SMART). As needed the incumbent will also assist ABMEs in performing routine and special field engineering investigations on existing highway bridges and sign structures on the State and Local highway networks as a second member of an investigation team. The incumbent will assist Senior Bridge Engineer in administering contracts; maintain documents to manage other Local Agencies Bridge Inspection Programs. During emergency situations the positions may be required to work off-peak hours, seven day a week to assist ABMEs respond to bridge damage. Incumbent must possess and maintain a valid California Drivers License.

### **TYPICAL DUTIES:**

Percentage Essential (E)/Marginal (M)	Job Description
50% (E)	Under the supervision of Senior Bridge Engineers assist in maintaining BIRIS, microfilm files of As-Built Bridge plans and provide prints as requested. Maintain technical files; assist the permit engineers in the review of encroachment permit applications, airspace usage and improvements affecting bridges proposed by the Districts and other agencies. Assist Area Bridge Maintenance Engineers preparing pre-inspection reports for field investigations or field work on bridge and sign structure inspections as needed.
25% (E)	Transfer (input data, scan and archive) Bridge Inspection Reports (BIRs) into Bridge Inspection Records Information System (BIRIS) and Structure Maintenance Automated Report Transmittal (SMART) system. Look up for bridge related data in SMART, BIRIS and Bridge Book to make corrections and changes.

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| 10% (E) | Assist Senior Bridge Engineer administer contract and oversight work of Local Agencies Bridge Inspection Programs in maintaining document submittals, reviews, transmittals and invoices. |
| 15% (M) | Receives walk-in customers and offers help to them as necessary. Occasionally make field trips on Encroachment Permit related bridge and sign structure inspection duties.                |

### **SUPERVISION EXERCISED OVER OTHERS:**

This position does not supervise other employees. However, the incumbent may coordinate the work of other employees depending on the situation. The incumbent receives supervision consisting of periodic checks on the progress of work from Senior Bridge Engineers, and guidance from Area Bridge Maintenance Engineers (ABMEs), Structure Maintenance Design Engineers, and Encroachment Permit review Engineers.

### **KNOWLEDGE, ABILITIES AND ANALYTICAL REQUIREMENTS:**

The incumbent must be able to function at the Transportation Engineer Technician level. Must have the ability to extract pertinent data from various sources and record the data on a computer. This includes knowledge of bridge and sign structure types and numbering systems, State and County route numbering systems. Must have the ability to read Interchange Maps and sketches, locate and use State and County Bridge Books, and take off information from bridge plans; ability to analyze situation accurately and take appropriate action; prepare reports.

Must possess knowledge of construction and maintenance of bridge structures to be able to assist public agencies and consultants in providing, obtaining and documenting bridge related information of various projects

The ability to make neat and accurate engineering notes and prepare concise engineering reports and uses engineering and computer-oriented processes to gather, compile, and analyze data.

The ability to collect physical and statistical data and accurately maintain that data in a comprehensive database.

The ability to work independently with a minimum of direction or supervision.

The ability to travel and work throughout Southern California.

The ability to safely operate a variety of office and bridge inspection tools and equipment.

### **CONSEQUENCES OF ERROR/RESPONSIBILITY FOR DECISIONS:**

Filing and inputting technical records, Bridge Inspection Reports, As-Built plans and other bridge related information into SMART and BIRIS that requires accuracy and ensuring adequacy

of encroachment permit applications, airspace usage and improvements affecting bridges. Errors in judgment and/or decisions could directly affect public safety. Inaccurate, delayed or incomplete work and reporting activities may result in a reduction of public mobility, increased maintenance/operations costs, inaccurate project scope, unnecessary delays in bridge rehabilitation or replacement projects and potential tort liability for the Department.

### **PUBLIC AND INTERNAL CONTACT:**

Must maintain oral and written contact with Public Agencies, Consultants, the Districts and Division of Engineering Services (DES) Project Development and various Department offices and branches. Internal contact includes conversation with ABMEs or Design Engineers regarding the coding on Bridge Reports, bridge numbering and the status or availability of As-Built plans. Public contact includes furnishing plans and reports or instructing others to the use of computer system to access information.

This position must maintain a good relationship with customers, Caltrans personnel, consultants, city and county agencies and the public.

### **WORK ENVIRONMENT:**

While at their base of operation, the employee will work in a climate-controlled office under artificial lighting. While in the field, the employee is required to drive State vehicles and work outdoors and may be exposed to dirt, dust, loud noises, traffic, chemicals, uneven surfaces and a variety of sometimes extreme weather conditions including wind, rain, heat up to 120 degrees, cold as low as 15 degrees, strong winds, rain, sleet or snow. While in the field assisting ABMEs, the employee could be exposed to various physical conditions that exist around bridge and sign structures including working at heights, around water, in confined spaces, around traffic, in boats and on under bridge inspection equipment or lift equipment. The work environment is split approximately 75% between a base of operation and various field locations throughout southern California. Travel may be required, therefore, incumbent must be able to travel using a car or commercial transportation. Travel might involve being away from the base of operations for a significant amount of time consecutively.

### **PHYSICAL, MENTAL AND EMOTIONAL REQUIREMENTS:**

The employee is required to make critical safety decisions in emergency conditions relative to Bridge, Wall and Sign structural stability with little supervision. The employee must be able to participate in first aid/safety training and may be required to administer first aid in the field in the event of an injury.

Hearing and sight are both essential to job performance because the employee must be able to hear directions, traffic and equipment and must see to perform his/her duties safely. The employee should be able to travel with and work closely with other engineers and act as a team

member. The employee is required to sit for long periods of time while driving or using a keyboard and video display terminal.

A Bridge, Wall or Sign inspection might require an employee to walk up or down a steep incline, climb fences as high as eight (8) feet, and push or pull doors or scaffolding. Incumbent may be required to climb interior or exterior ladders, catwalks or scaffolding, and perform his/her inspection duties at heights as high as 700 feet above water or land.

The employee is required to lift and operate inspection tools and equipment, which weight as much as 65 pounds. These operations require grasping, fine manipulation, reaching overhead with the tools or equipment, twisting, lifting, squatting, crouching, balancing or bending while carrying the tools and equipment through confined spaces, on ladders or scaffolds, and then observing and recording the results of their operations.

The employee may also be required to work in streambeds and river crossings that are underneath structures, in water depths that may exceed (6) feet. This involves the ability to wade in water at those depths or utilize flotation devises. Employee must have the ability to safely access and operate boats or other equipment in strong water currents and under adverse weather conditions. The employee is required to operate a variety of inspection equipment, including inspection trucks, lift equipment and boats. This required the employee to utilize his/her motor skills to operate and manipulate gears, drills, foot controls and other vehicles parts that control the motor or machinery.

I have read and understand the duties listed above and can perform them with/without reasonable accommodation.

Please Print:

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EMPLOYEE'S NAME	DATE
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EMPLOYEE'S SIGNATURE	DATE
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I have discussed the duties with and provided a copy of this duty statement to the employee named above.

Please Print:

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SUPERVISOR'S NAME	DATE
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SUPERVISOR'S SIGNATURE	DATE
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